

Nevada Site Specific Advisory Board (NSSAB)

Full Board Meeting

Frank H. Rogers Science and Technology Building 755 East Flamingo Rd, Las Vegas, NV 4:00 p.m. – June 21, 2017

Members Present: Amina Anderson, Arcadio Bolanos, Frank Bonesteel (Vice-

Chair), Karen Eastman, Pennie Edmond, Raymond Elgin, Richard Gardner, Donald Neill, Autumn Pietras, Steve

Rosenbaum (Chair), Edward Rosemark, William Sears, Cecilia Flores Snyder, Richard Stephans, Jack Sypolt, Richard Twiddy,

Dina Williamson-Erdag

Members Absent: Michael Anderson, Michael D'Alessio, Charles Fullen

Liaisons Present: John Klenke (Nye County Nuclear Waste Repository Project

Office [NWRPO]), Phil Klevorick (Clark County), Carol McKenzie (White Pine County Commission), Mark McLane (State of Nevada Division of Environmental Protection [NDEP]), Jonathan Penman-Brotzman (U.S. National Park Service [NPS])

Liaisons Absent: Richard Arnold (Consolidated Group of Tribes and

Organizations [CGTO]), Vance Payne (Nye County Emergency

Management [NCEM]), Dan Schinhofen (Nye County

Commission), Delon Winsor (Esmeralda County Commission)

Department of Energy (DOE): Robert Boehlecke, John Myers, Kelly Snyder (Deputy

Designated Federal Officer [DDFO])

Facilitator: Barb Ulmer (Navarro)

Contractors: Irene Farnham, Brian Haight, Marc Klein, Ken Rehfeldt

(Navarro); Jenny Chapman, William Hartwell, Tim Minor, Chuck Russell (Desert Research Institute [DRI]); Jeff Sanders (United

States Geological Survey [USGS])

Public Signed In: Rod McKenzie (Lund, NV), James Moldenhauer (North Las

Vegas, NV), Geoff Moset (Henderson, NV), Keith Rogers (Las

Vegas Review-Journal)

Open Meeting/Chair's Opening Remarks

Chair Steve Rosenbaum welcomed everyone to the meeting. Following the Chair's opening remarks, Member Raymond Elgin moved to approve the agenda as presented. The motion was seconded and passed unanimously.

Public Comment

There was no public comment.

U.S. DOE Update (Robert Boehlecke, DOE)

During the past couple of months, Mr. Robert Boehlecke noted that the Environmental Management (EM) Nevada Program has provided briefings to the Goldfield fire chief, Beatty Town Advisory Board, Esmeralda and Nye County Commissions, Nye County Local Emergency Planning Committee, Low-Level Waste (LLW) Stakeholders Forum, and the NSSAB regarding field activities and the transportation of contaminated soil from the Tonopah Test Range (TTR) to the Area 5 Radioactive Waste Management Site (RWMS) at the Nevada National Security Site (NNSS). There have been technical and procurement delays; so the work is now scheduled to begin in the August 2017 timeframe. The transportation of the soil from the TTR to the Area 5 RWMS along Highway 95 through Tonopah, Goldfield, and Beatty to the NNSS is scheduled to begin in late August/September 2017.

Mr. Boehlecke updated the Board on the permit modification application for the proposed mixed LLW (MLLW) cell. Yesterday, the EM Nevada Program briefed the Nye County Commission on the permit modification application. NDEP has submitted the document for a public comment period for 45 days that closes this week. NDEP will determine if an additional public meeting will be held. If NDEP approves the permit modification, construction is planned to commence in the mid-August 2017 time frame. Construction is a six-month process, and if the schedule holds the new MLLW cell would be complete in mid-March 2018.

At the last LLW Stakeholders Forum meeting in May 2017, Mr. Boehlecke reported that a tentative date for mid-January 2018 was decided for the next tabletop emergency exercise in Nye County. The EM Nevada Program will meet and plan the tabletop exercise with NCEM to ensure that their needs are incorporated into the exercise.

Mr. Boehlecke stated that the EM Nevada Program budget for fiscal year (FY) 2017 is about \$62 million which is consistent with FY 2016 funding. In FY 2018, the budget is about \$60 million. This level of funding will allow the EM Nevada Program to maintain operations and meet all regulatory milestones.

Mr. Boehlecke concluded that an announcement was made recently regarding the National Nuclear Security Administration's contract award for its Management and Operating contractor. The contract is still undergoing the procurement process and has not been signed at this time.

Liaison/Student Intern Updates

Clark County (Phil Klevorick)

Liaison Phil Klevorick noted that the LLW Stakeholders Forum is proactive and responsive, and he would like to see the group continue to meet in the future. Two weeks ago, he attended the National Transportation Stakeholders Forum (NTSF) in Pittsburgh, Pennsylvania. The purpose of the NTSF is to discuss the safety of waste transportation and emergency response, and this year there was much discussion on Yucca Mountain. Liaison Klevorick reported on a meeting that he attended last week in Washington D.C. to discuss clarifications of the waste category definitions for DOE waste. If approved, a redefinition of DOE waste categories will impact certain waste streams destined for the NNSS, Yucca Mountain, and other disposal facilities across the country. He updated the Board on an incident at the Hanford, Washington site that occurred in May 2017. This incident involved a collapse of a tunnel with trains filled with high-level waste that did not result in any detectable release of contamination. Lastly, Liaison Klevorick updated that the Waste Isolation Pilot Plant (WIPP) has been operational for two months and has begun accepting transuranic waste (TRU) from the Idaho National Laboratory. Due to ventilation limitations, WIPP is not able to operate at the same level as before the shutdown. They are currently accepting two containers per week with the plans of increasing to six containers per week. This reduction in operations will extend the disposal timeline for TRU waste.

NWRPO (John Klenke)

Liaison John Klenke had nothing to report.

NPS (Jonathan Penman-Brotzman)

Liaison Jonathan Penman-Brotzman stated that the NPS is interested in the transportation of radioactive waste to the NNSS as State Route 127 is a transportation route and shares a boundary with the Death Valley National Park (DVNP). The NPS is also interested in groundwater issues as the DVNP borders the NNSS.

White Pine County Commission (Carol McKenzie)

Liaison Carol McKenzie had nothing to report.

<u>Groundwater Communication Activities – Work Plan Item #7 (Kelly Snyder DDFO, DOE)</u>

NSSAB Work Plan Item #7

- NSSAB to provide a recommendation, from a community perspective, if additional communication tools should be developed to help communicate groundwater-related topics to the general public
- o Things to consider
 - What level of interest does the public have?
 - Are there gaps in the current communication tools (format, types of information, locations, etc.)?
 - Funding used to develop and maintain communication tools is the same funding used for technical analysis and field activities

• Briefing Outline

- o Background
- Existing Communication Activities
- Community Environmental Monitoring Program
- Groundwater Interactive Maps

• Historic Nuclear Testing Impacts on the Groundwater

- 828 underground nuclear tests conducted at the Nevada National Security Site (NNSS) from 1951 to 1992
- Underground tests conducted at depths ranging from approximately 90 to 4,800 feet below the ground surface
- o One-third of these tests occurred near, below, or in the water table
- Some radioactive contamination detected in groundwater on the NNSS and the Nevada Test and Training Range (NTTR)

What Needs to be Communicated to the Public?

- Public water supply is safe from the impacts of historic underground nuclear testing
 - Current research shows contaminated groundwater exceeding Safe Drinking Water Act standards is not expected to reach public water supplies
- The science continues
 - As part of a long-term monitoring program, ongoing scientific studies will continue into the future to identify where contaminated groundwater is located, in which direction it flows, and its rate of movement

Long-term Groundwater Communication Strategy

- Over the next decade groundwater corrective action units will be transitioned from active research/modeling to long-term monitoring
- When areas are transitioned to long-term monitoring, communication with the public will be increased to ensure awareness
 - DOE anticipates additional communication will be needed when the Pahute Mesa area is transitioned to long-term monitoring

<u>Existing Groundwater Communication Activities (Marc Klein, Navarro Strategic Communications)</u>

Groundwater Animation

- o https://www.youtube.com/watch?v=wJG-S0rMcms
- Resulted from an NSSAB recommendation
- Viewed more than 600 times on YouTube
- o Cost nearly \$20,000

Kiosks

- o Interactive, touch-screen kiosks (2)
 - Hosted by communities throughout Nevada
 - Currently at Public Reading Room in the Frank H. Rogers Science and Technology Building and UNLV Lied Library
 - Past locations include the Central Nevada Museum in Tonopah; Beatty Museum; and Amargosa Valley, Indian Springs, Las Vegas, Henderson and Pahrump libraries
 - Nevada Field Office internet and social media websites
 - Related government websites
 - NNSS remediation sites map
 - Initial cost more than \$16,000, plus annual costs for software maintenance agreement, technology updates, and moving to different locations

Open Houses

- Environmental Management (EM) Nevada Program hosts periodic Groundwater
 Open House events with posters, discussions, demonstrations, status and handouts
 - Gain community perspectives on specific issues or the release of documents/information
 - Have been held in both Beatty and Amargosa Valley
 - Average number of attendees is 31 per event (since 2012)

Costs ~\$70,000 in labor and ~\$3,000 in materials/postage

EM Groundwater-focused Tours

- o Public signups collected at groundwater open houses
- o NSSAB annual work plan tours include groundwater briefings
- Agenda stops typically include groundwater corrective action locations, core library, well drill sites, etc.
- Average number of public attendees in 2016 was 19
- Cost ~\$6,500/tour

School Visits

- "Ant farm" groundwater demonstrations
 - Cross-section model shows how subsurface conditions affect water movement
 - 5-10 demonstrations per year
 - Cost ~\$2,500/visit

Operation Clean Desert

- Student activity book, teacher's guide and interactive computer game geared toward educating 6th and 8th grade students – "Reaching tomorrow's stakeholders today"
- o Contains a groundwater-specific section
- Reaches multiple audiences (students bring the books home to their parents and siblings)
- Received award from U.S. Environmental Protection Agency
- More than 37,000 distributed since 2007
- Cost ~\$5,000/year (~\$1/book)

Social Media

- Facebook 2,918 likes https://www.facebook.com/NNSANevada/
- Twitter 585 followers https://twitter.com/NNSANevada
- YouTube 277 subscribers, 176 videos, and 120,906 views https://www.youtube.com/user/NNSANevada
- Flickr 22 followers and 922 photos https://www.flickr.com/photos/nnsanevadasiteoffice

Articles

- Published as an EM News Flash and/or in Headquarters' EM Update newsletter
- Distributed via e-mail to over 6,300 NNSS news subscribers (public, employees and media) and published to Nevada Field Office website (www.nnss.gov)
- o NSSAB members are automatically subscribed to receive via e-mail

Fact Sheets and Brochures

- Selection on groundwater topics and other EM activities
 - Electronic version
 - Nevada Field Office website (http://www.nnss.gov/pages/resources/library/FactSheets.html)
 - EM kiosks
 - Hard copy
 - Public Reading Room (across lobby from National Atomic Testing Museum)
 - Upon request in single or group quantities

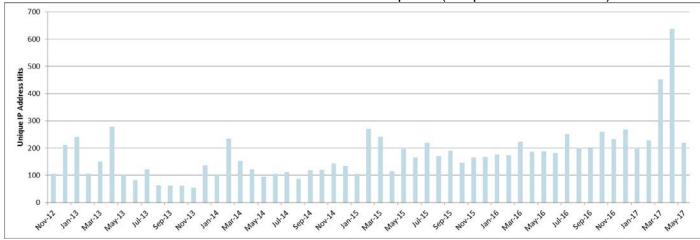
• NNSS Environmental Report

- Produced annual and publicly available on website at http://www.nnss.gov/pages/resources/library/NNSSER.html
- Includes environmental restoration activities and sampling results of water, air, plants, and animals at NNSS, Tonopah Test Range, and NTTR

Entire chapter devoted to groundwater monitoring at the NNSS

NNSS Remediation Site

- During public comment period for NNSS Site-Wide Environmental Impact Statement, comment was received that it was not necessarily transparent how much remediation progress had taken place at the NNSS
- o Some NNSS environmental restoration information available online
- Decision was made to produce an interactive map where remediated sites could be easily differentiated from non-remediated sites
 - DRI had outward looking server
 - Navarro had the data
- Associated documents publicly available online at https://www.osti.gov/ (Office of Scientific and Technical Information [OSTI] in Oak Ridge)
- DRI and Navarro partnering effort supporting DOE
- Federal Facilities Agreement and Consent Order data and OSTI
- o http://nnssremediation.dri.edu/
- Initial development cost was ~\$30,000
- Average cost to maintain website is ~\$5,000 per year
- o Hits on NNSS Remediation Interactive Map site (unique web addresses)



The Community Environmental Monitoring Program (CEMP) (William "Ted" Hartwell, DRI, Program Manager for CEMP)

• CEMP

- Established in 1981
- Facilitates communication between DOE, National Nuclear Security Administration (NNSA), and the communities surrounding the NNSS
- Increases accessibility to and transparency of monitoring data
- o Provides hands-on role for the public in the monitoring process
- Funded by the NNSA Nevada Field Office
- Administered by the DRI of the Nevada System of Higher Education
- 24 active monitoring stations
- o All stations collect information on background radiation and weather
- Water testing for tritium in down-gradient communities (coordination with Nye County on larger sampling program funded by EM grant)
- Employs members of the local communities as Community Environmental Monitors (CEMs) to serve as station managers

Public Outreach

- CEMP Website
- CEMP stations

- Interpretive display
- Brochures
- o CEMs
- Target Outreach
 - Schools
 - National Atomic Testing Museum (NATM)
 - Community events
 - Civic organizations

Public Contacts in 2016

- o CEMP website
 - 878,927 unique visits (2,000,000+ days of data downloaded)
- o CEMs
 - 2,376 individual contacts
- o DRI
 - 411 at NATM tours
 - 297 at local events
 - 2,000+ at LV Science & Technology Festival
 - 100+ email/phone inquiries

Typical Communications and Questions

- Is it safe? (both personal and corporate)
- Requests for presentations
- o Requests for data (personal, educational, corporate)
- Requests for interpretation of data
- Data not posting to website/broken links
- Requests to connect to website/post links

Contact Information for CEMP

- Ted Hartwell DRI Program Manager for CEMP (702) 892-5419
- o Carrie Stewart NNSA Program Manager for CEMP (702) 295-0077
- Darwin Morgan NNSA Office of Public Affairs (702) 295-3521
- CEMP Website http://cemp.dri.edu/

Potential Communication Tools (*Matt Knop, Navarro Data Management Lead and Tim Minor, DRI Senior Scientist*)

Evolving Technology

- Mapping/data presentation capabilities evolving
- o Original implementation was stand-alone internet server with mirrored data
- Data visualization alternatives were limited
- Applications can now be created on virtual machines and can access information/ data from local and web-based resources
- Applications and data can be hosted in cloud environments (e.g. Amazon Secure Government Cloud)
- Multi-media support and advanced data/mapping tools can now be used to create visually rich data presentation sites
- Some mapping sites use social media to capture data in real-time

• Los Alamos Intellus Site

- Very complex sites that make large volumes of data available through multiple interfaces
- Great for access to all data but may overwhelm the casual user
- Does not focus on "an" issue so the intended message may be missed
- Initial development cost >\$1 million

• U.S. Environmental Protection Agency (EPA) Radiological Monitoring Site

- Focuses on a single parameter from many locations
- Simple to use by a casual user
- Higher probability that the user will understand the intended message
- Initial development cost ~\$100,000

• EPA Viewpoints Site

- o Focuses on a single topic for multiple locations using a multi-media experience
- Can be cloud based (hosted)
- Engages the casual user
- Offers multiple presentation formats to tell a story
- Initial development cost ~\$40,000

Which Format is Best for the NNSS?

- Some sites have multiple issues that are of public concern
- o The more parts to the message, the more elaborate the site
- As website complexity increases, risk of obscuring the intended message goes up
- Focus the message on issue of concern
- Use platform that best informs the typical site visitor about the issue

Match the Presentation to the Message

- 1. Identify stakeholder/typical site user base
- 2. Identify issue(s) of concern, determine topical focus, and evaluate level of detail required to present information
- 3. Select best solution to present information on subject of concern

NSSAB Path Forward

- At the August 16, 2017 Full Board meeting provide a recommendation, from a community perspective, if additional communication tools should be developed to help communicate groundwater-related topics to the general public
- o What level of interest does the public have?
- Are there gaps in the current communication tools (format, types of information, locations, etc.)?
- Funding used to develop and maintain communication tools is the same funding used for technical analysis and field activities

In response to Board questions, the following clarifications were provided:

- Depending on the communication piece or event, the EM Nevada Program either targets a
 specific audience that may have a stronger interest in the information as they live closer to
 the NNSS or tailors the information more broadly to the general public. Currently, EM
 Nevada Program communication materials are not available in different languages. The
 EM Nevada Program routinely submits public service announcements (PSA) to the media.
- The costs of hosting a groundwater open house includes the salaries and travel for approximately 20-25 subject matter experts (SME) from DOE contractors (Los Alamos National Laboratory [LANL] in New Mexico, Lawrence Livermore National Laboratory [LLNL] in California, USGS, DRI, Navarro, National Security Technologies, Inc.) that are involved with NNSS groundwater activities. These costs include, but not limited to, the planning and production of the materials/posters used for the event, a face-to-face dry run of the SMEs to discuss the materials/information to be presented at the open house, the reviews for accuracy and for public release of any materials, the actual travel to and support during the event, and the post-planning meetings for lessons learned.
- The last groundwater open house held in FY 2016 was the seventh one hosted by the EM Nevada Program. The number of SMEs has been reduced for the most recent groundwater open houses. The EM Nevada Program feels that the groundwater open

- house is a good forum for communicating with the public in their communities and giving them the opportunity to ask questions from the SMEs who are working on the program.
- At least one member of the media has been in attendance at past groundwater open houses, although media attendance has not always resulted in an article in the local newspaper.
- It is difficult to quantify/qualify if the low attendance at the groundwater open houses is due to the public having the information that they need in order to be comfortable regarding groundwater at the NNSS or if they were not aware of the event happening in their community.
- EM Nevada Program advertises its groundwater open houses by direct mailers to the communities and the surrounding area, encouraging public officials to get out the information, paid newspaper advertising, PSA, and hand-delivered flyers to public community locations, such as libraries and post offices.
- SMEs from LANL and LLNL are available at the groundwater open houses as they have significant scientific knowledge as it relates to a very complex groundwater program. These scientists have decades of expertise and firsthand knowledge of the program and the data and are very valuable and effective in answering questions from the public.
- The CEMP primarily focuses on air monitoring, although it does include a small groundwater monitoring component and responds to questions from the public regarding the data.
- By regulation, DOE is required to host certain events, such as, the public meeting that was held in December 2016 for the MLLW permit modification application. Other public outreach, such as, open houses, fact sheets, school visits, website, and the advisory board are not required, although the EM Nevada Program feels that it is important to be accessible to the public and have a partnership with the community rather than acting within itself.

Since the presentation focused only on groundwater-specific public outreach activities conducted by the EM Nevada Program, DDFO Snyder committed to provide the Board with additional information on other public outreach activities not related to NNSS groundwater for Board review for the August 16, 2017 Full Board meeting. After extensive Board discussion and guestions, Member Edward Rosemark made a motion to table providing a recommendation to DOE for the Groundwater Communication Activities work plan item until the August 16, 2017 Full Board meeting. The motion was seconded and passed by a majority.

<u>Liaison/Student Intern Updates (continued)</u>

NDEP (Mark McLane)

Liaison Mark McLane commented that the deadline for providing comments to NDEP on the MLLW permit modification application is June 23, 2017. In July 2017, NDEP will provide responses to these comments and share with stakeholders that request the information.

Internal Peer Review Process Improvement – Work Plan Item #6 (Vice-Chair Frank Bonesteel, Member Cecilia Flores Snyder, and Member William Sears)

Vice-Chair Bonesteel reported that he and Members Sears and Flores Snyder observed the Yucca Flat/Climax Mine (YF/CM) Internal Peer Review for the Corrective Action Decision Document/ Corrective Action Plan (CADD/CAP). This work plan item was for the NSSAB to provide a recommendation as to how the Underground Test Area (UGTA) internal peer review process could be enhanced from a community perspective. Vice-Chair Bonesteel explained that **NSSAB Full Board Meeting**

the NSSAB subcommittee participated on conference calls on March 1, April 3, and May 1, 2017 with the UGTA science advisor who explained the process and answered questions. The YF/CM Internal Peer Review Committee received a response from the UGTA modeling team on its draft report of summary comments on May 3, 2017 with a final response received by the committee on May 22, 2017.

Member Sears noted that the terminology and content of the internal peer review for the YF/CM CADD/CAP was very complex and technical. As a result, he felt that it was not of value for NSSAB members to attend, and he did not have suggestions for process improvements.

Member Flores Snyder informed the Board that she observed that communication over the telephone was very effective, although a face-to-face or WebEx meeting during this process would have been helpful, primarily due to the fact that much of communication is nonverbal. She continued that a face-to-face meeting, especially during the initial discussion of the comment resolution, would have been beneficial for this reason. Member Flores Snyder added that the phone meetings had time constraints, and the committee was disciplined in keeping within the time frame; however she felt that it may have been valuable to provide flexibility in order to provide sufficient time for discussion.

Vice-Chair Bonesteel also noted that a face-to-face meeting may have been more productive as everyone would be located in the same room. He also agreed that in many instances the meeting was structured tightly, and the committee tended to rush through the agenda in order to complete discussion in the allotted time.

After NSSAB discussion, Vice-Chair Bonesteel made a motion that the NSSAB submit recommendations to DOE based on the NSSAB subcommittee's observations of the YF/CM Internal Peer Review. The NSSAB recommends that DOE conduct at least one face-to-face or WebEx meeting during the internal review process to improve efficiency, primarily due to the fact that much of communication is nonverbal. The NSSAB also recommends that there is flexibility in the length of the meetings to provide sufficient time for discussion. The motion was seconded and passed unanimously.

Other NSSAB Business (Steve Rosenbaum, Chair)

From May 8 -11, 2017, Chair Rosenbaum and Vice-Chair Bonesteel attended the spring EM SSAB National Chairs' Meeting hosted by the Paducah Site Office, Paducah, Kentucky. Chair Rosenbaum provided the Board with an update on the meeting presentations, the tour of the Paducah Site, and the various networking events. His presentation of Nevada's Round Robin topics to the Acting Assistant Secretary for EM (EM-1), Sue Cange, received immediate feedback that measures are being taken to mitigate the impending brain drain across the DOE complex.

Based on an NSSAB charge from the March 15, 2017 Full Board meeting, Chair Rosenbaum brought forward a draft recommendation to conduct a national survey to assess potential exposure from truck transport of DOE waste across the country. During the meeting, DOE's Office of Transportation provided additional information that the last study in FY 2003 conducted at the NNSS resulted in findings that did not exceed dose limits and therefore would not be supportive of appropriating the funding that could be designated for cleanup activities. Chair Rosenbaum withdrew the recommendation and will draft a proposed recommendation for deliberation at the fall EM SSAB National Chairs' Meeting that DOE utilize the 2003 NNSS transportation study to create a new or revised communication tool for public outreach on a national level.

EM-1 tasked the EM SSAB to review DOE's current performance metrics and provide a recommendation on how EM can better communicate its cleanup activities to the public. In response to this charge, the EM SSAB drafted a recommendation for "Cleanup Performance Road Map and Communication Strategy." Vice-Chair Bonesteel made a motion to endorse this draft recommendation. The motion was seconded and passed unanimously.

The EM SSAB also drafted a proposed recommendation for "Above Ground Storage at the Waste Isolation Pilot Plant." Member Jack Sypolt made a motion to endorse this draft recommendation. The motion was seconded and passed with a majority. The NSSAB Office will notify EM Headquarters that the two draft recommendations were passed by the NSSAB.

Chair Rosenbaum noted that there is DOE reimbursement for two NSSAB members to attend the RadWaste Summit in Las Vegas, Nevada on September 5-7, 2017. Members Richard Stephans and Donald Neill volunteered to attend the conference with Chair Rosenbaum as an alternate.

Communication Improvement Opportunities (Work Plan #9)

In response to providing recommendations on ways that DOE can improve/enhance communication to the public, Chair Rosenbaum suggested that DOE simplify the path to the NSSAB pages on its website. For informational purposes, DDFO Snyder responded that there is an option of a more direct way to the NSSAB pages on the www.nnss.gov homepage via the Public Affairs/Outreach tab. Member Flores Snyder requested that this work plan item be moved up in the agenda for future meetings. Member Dina Williamson-Erdag suggested that more Nevada-specific articles be included in the EM Updates Newsletter that is published by EM Headquarters. As a result of the groundwater communication briefing earlier in the meeting, she also advised that certain communications need to be more targeted to the intended audience rather than to the general public. Member Richard Twiddy inquired whether DOE has reached out to communication students to write short articles of interest on the NNSS. Member Sypolt noted that there are a number of magazines that may be interested in publishing articles on the NNSS, for example, the Valley Electric Association monthly magazine which reaches a rural audience and the AARP magazine that reaches a national audience.

Meeting Wrap-Up and Adjournment

Upcoming calendar of events:

- Next Full Board Meeting August 16, 2017 at the Bob Ruud Community Center in Pahrump, Nevada with educational session at 3 p.m. and meeting at 4 p.m.
- LLW Stakeholders Forum August 2, 2017 in Pahrump, NV
- RadWaste Summit September 5-7, 2017 in Las Vegas, NV
- Full Board Meeting September 20, 2017 in Las Vegas, NV
- EM SSAB National Chairs' Meeting October 16-19, 2017 in Hanford, WA

Any questions on the calendar of events, please contact the NSSAB Office at 702-630-0522.

Chair Rosenbaum welcomed and thanked the new liaison, Carol McKenzie, for attending the meeting. He also thanked Vice-Chair Bonesteel for his assistance in chairing the last two NSSAB meetings. Member Richard Gardner moved that the meeting be adjourned. The motion was seconded and passed unanimously.

Meeting adjourned at 8:07 p.m.